REMARKS

This Response, submitted in reply to the Office Action dated September 12, 2005, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-61 are pending in the present application.

I.   Rejection of claims 15-26, 38, 39, 45, 46 and 57-58 under § 102

Claims 15-26, 38, 39, 45, 46 and 57-58 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Saber et al. (Face Detection and Facial Feature Extraction Using Color, Shape and Symmetry-based Cost Functions; IEEE Proceedings on Pattern Recognition, ISBN: 1015-4651).

In response to Applicant's argument that the fitting of eigenvalues and eigenvectors does not occur until after skin classification, the Examiner disagrees asserting that it is well known that in order to identify the face in the image using a system, image segmentation is required to separate the face from the rest of the image. The Examiner further asserts that known image segmentation has previously been performed in various ways.

However, Applicant submits that the Examiner has still failed to establish that "a first extraction area is extracted according to a shape of regular geometric form of the specified image subject" since Saber clearly describes that an area of a human face is initially obtained by an adaptive color classification algorithm. See abstract.

Moreover, as indicated by the Examiner on page 5 of the Office Action, Saber discloses

first, skin/non-skin color classification and then second, shape classification, which is clearly **not**

the same as an exemplary embodiment of the claimed invention, as illustrated in for example,

Applicant's Fig. 4, and as recited in claim 15.

For at least the above reasons, claim 15 and its dependent claims should be deemed

allowable.

II.   Rejection of claims 1, 8, 27, 40, 41, 43, 47-51, 53 and 59-61 under § 103

Claims 1, 8, 27, 40, 41, 43, 47-51, 53 and 59-61 have been rejected under 35 U.S.C. §

103(a) as being unpatentable over Nguyen et al. (Segmentation, Grouping and Feature Detection

for Face Analysis; IEEE Proceedings in Computer Vision, ISBN: 0-8186-7190-4) in view of

Saber.

Claim 1 recites "implementing an extracting algorithm of a precedent stage under a

predetermined extracting condition to obtain an extraction result." The Examiner asserts that

Fig. 1, connected component labeling to create a silhouette and extracting a head image teaches

this aspect of the claim. See Office Action at page 15.

Claim 1 further recites "wherein said precedent stage comprises extracting a shape of

regular geometric form of the specified image subject." As previously indicated, the aspect of

Saber cited by the Examiner describes the extraction of a skin region by fitting an ellipse.

However, the extraction of a skin region is not the precedent stage (extraction of silhouette of

head image as discussed in Nguyen) cited by the Examiner. The description of the ellipse is

described towards final stages, rather than precedent stages. Therefore, the combination of Saber with Nguyen is not obvious.

For at least the above reasons, claim 1 and its dependent claims should be deemed allowable.

III.   Rejection of claims 28 and 29 under 35 U.S.C. § 103

Claims 28 and 29 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of Saber and Hasegawa et al. (Real-time Parallel and Cooperative Recognition of Facial Images for an Interactive Visual Human Interface; IEEE Paper ISBN: 1051-4651).

Although the experiments in Hasegawa are performed in a standard indoor environment in the day time (fluorescent lights and the sunlight from windows) and in the evening (fluorescent lights only), see section 5.1.1, there is no indication that a predetermined extracting condition of a precedent stage comprises electronic flash or backlight information. The Examiner makes assumptions in the reference that are not taught or suggested.

Further, the combination of Hasegawa with Saber is not obvious since Hasegawa does not appear to be at all concerned with facial feature detection as discussed in Nguyen, but is concerned with maintaining eye contact between a user and a synthesized moving human like agent (see abstract).

For at least the above reasons, claims 28 and 29 should be deemed allowable.

III.   Allowable Subject Matter

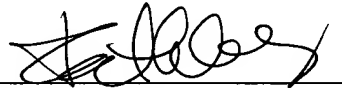Claims 2-7, 9-14, 30-37, 42, 44, 52, and 54-56 have been allowed.

IV.   Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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